



Louisville Metro Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137



Federally Enforceable District Origin Operating Permit (FEDOOP)

Permit No.: O-1553-16-F (R3)

Plant ID: 1553

Effective Date: 3/28/2016

Expiration Date: 3/31/2021

Revision Date: 02/28/2020

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Source: Republic Conduit Manufacturing
7301 Logistics Dr.
Louisville, KY 40258

Owner: Republic Conduit, Inc.
7301 Logistics Dr.
Louisville, KY 40258

The applicable procedures of District Regulation 2.17 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than twelve months and no later than ninety days prior to the expiration date.

Emission limitations to qualify for non-major status:

Pollutant:	VOC	HCl (HAP)
Tons/year:	< 100	< 10

Application No.:

See Application and Related Documents table.

Public Notice Date:

02/23/2016; 01/31/2017; 10/22/2019

Permit writer: Yiqiu Lin



Air Pollution Control Officer
2/28/2020

Table of Contents

Federally Enforceable District Origin Operating Permit (FEDDOOP)	1
Permit Revisions and Changes.....	4
Construction Permit Summary	4
Application and Related Documents.....	5
Abbreviations and Acronyms	7
Preamble	8
General Conditions	8
Plantwide Requirements	12
Facility Description.....	12
Applicable Regulations.....	12
Plantwide Specific Conditions.....	13
Emission Unit U1: Weld Mills.....	18
Applicable Regulations.....	18
Equipment: '	18
Control Devices	19
U1 Specific Conditions	20
Emission Unit U2: LEMT Electro Galvanizing Line	23
Applicable Regulations.....	23
Equipment: ".....	24
Control Devices	24
U2 Specific Conditions	25
Emission Unit U3: Hot Dip Galvanizing Line.....	30
Applicable Regulations.....	30
Equipment.....	30
Control Devices	31
U3 Specific Conditions	32
Emission Unit U4: Thread Lines	38
Applicable Regulations.....	38
Equipment: '	38
Control Devices	39
U4 Specific Conditions	40

Emission Unit U5: Natural Gas-fired Boilers and Heaters	42
Applicable Regulations	42
Equipment:	42
Control Devices	43
U5 Specific Conditions	44
Emission Unit U6: Paint Coating Operations	46
Applicable Regulations	46
Equipment:	46
Control Devices	47
U6 Specific Conditions	48
Insignificant Activities	52
Emission Unit IA1: Emergency Generator	53
Applicable Regulations	53
Equipment:	53
Control Devices	54
IA1 Specific Conditions	55
Emission Unit IA2: Storage Tanks and Totes	63
Applicable Regulations	63
Equipment:	63
Control Devices	63
IA2 Specific Conditions	66
Emission Unit IA3: Parts Washers	68
Applicable Regulations	68
Equipment	68
Control Devices	68
IA3 Specific Conditions	69
Attachment A - 40 CFR 63, Subpart WWWW (MACT)	72
Attachment B - Calculation Methods and Emission Factors	78
Attachment C - Protocol Checklist for a Performance Test	80
Attachment D – Determination of Benchmark Ambient Concentration (BAC)	81
Attachment E - Source-Wide Activities Not Otherwise Regulated	82
Fee Comment	83

Permit Revisions and Changes

Permit No.	Public Notice Date	Issue Date	Change Type	Description/Scope
O-1553-16-F	2/23/2016	3/28/2016	2/23/2016	Initial Permit Issuance and Owner name changed from TENARIS USA to Maverick C&P, Inc.
O-1553-16-F (R1)	1/31/2017	3/06/2017	Admin Revision	Typo corrections on pages 21, 27, 36, and 41 – change “quarterly” to “annual” Typo corrections on pages 51 and 52 - change “semi-annual” to “annual” Removed HCl recovery unit from U3-E23 and added “Source-Wide Activities Not Otherwise Regulated”
			Significant Revision	Revise General Condition #10 to remove GHG limit.
O-1553-16-F (R2)	N/A	6/20/2018	Admin Revision	Ownership change. Addition of two new LEMT line burners (IAs) and removal of thermal oxidizer C22. Revision of emission factors in Attachment B.
O-1553-16-F (R3)	10/22/2019	2/28/2020	Admin Revision	Update unit information per application. Incorporation of IAs.
			Significant Revision	Incorporation of construction permit C-1553-1037-18-F. Removed Pb and Cd risks for weld mills (U1) and removed risks for IA emergency generator. Updated Cr(6) risk value for U3-E28 per newly tested emission factor.

Construction Permit Summary

Permit No.	Issue Date	Description
13-05-C	3/31/2006	LEMT electro galvanizing line
14-05-C	3/31/2006	One (1) wet scrubber #2 (9G)
15-05-C	3/31/2006	One (1) LEMT inch mark printer (E9I)
18-05-C	3/31/2006	Hot dip galvanizing line
19-05-C	3/31/2006	One (1) wet scrubber #3 (11B)
22-05-C	3/31/2006	Rigid finishing line (E13AB1 - E13C5)
25-05-C	3/31/2006	Zinc dissolution process
26-05-C	3/31/2006	Wastewater treatment plant
27-05-C	3/31/2006	Parts washers
474-07-C	8/31/2008	Three (3) existing weld mills
475-07-C	8/31/2008	One (1) baghouse, make Farr APC, model GS20.
443-08-C	6/30/2008	535 BHP (399 kW-hr) emergency generator
526-08-C	9/10/2008	Mist eliminator from the passivation process
587-08-C	10/31/2008	Three (3) storage tanks

Permit No.	Issue Date	Description
588-08-C	10/13/2008	Aerosol touch up coating operation
589-08-C	10/31/2008	Weld flaw ink mark coating
692-08-C	11/30/2008	small diameter thread line surface coating
693-08-C	11/30/2008	Coating for large diameter thread line
20-05-C(R2)	12/8/2009	Hot dip galvanizing line
21-05-C(R1)	10/31/2009	Baghouse for hot dip galvanizing
24-05-C(R1)	7/31/2009	Combustion sources
28-05-C(R2)	3/31/2009	Storage tanks
93-08-C	1/31/2009	Gimeco hydrochloric acid recovery unit
32-09-C	3/31/2009	One (1) 12,750 gallon paint tank, T-2.
33-09-C	1/31/2009	Two (2) ultra violet ink printers
34-09-C	1/31/2009	Three (3) storage tanks
130-09-C	6/30/2009	Metaullics zinc recovery (MZR) system
20-10-C	2/5/2010	cold solvent parts washer
54-10-C	4/13/2010	Two (2) cold solvent parts washers
35226-12-C	5/30/2012	change to water based paint
C-1553-1037-18-F	12/7/2018	Construction permit for miscellaneous equipment modification, replacement, and new installation for U1, U3, U5, and IA2.

Application and Related Documents

Document Number	Date	Description
22917	12/28/2007	Original FEDOOP Application ¹
22918	8/7/2008	FEDOOP Permit Application Addendum ¹
75913	9/16/2008	Name/Address Change document issued by Secretary of State 1
22919	10/29/2009	Revised FEDOOP Permit Application 1
22920	10/7/2010	Revised FEDOOP Permit Application 1
33895	11/4/2011	Revised FEDOOP Permit Application 1
35744	2/1/2012	Revised FEDOOP Permit Application including new constructions 1
78690	7/29/2016	Correspondence for TV permit administrative revision ²
78691	7/29/2016	Correspondence for TV permit administrative revision 2
78699	8/1/2016	Application form AP-100A to change Responsible Official
80589	11/23/2016	Correspondence related to description change of E23
81389	01/20/2017	Draft Permit sent for company review
90914	2/28/2018	Amended KY State Certificate of Authority

¹ For permit O-1553-16-F initial issuance issued 3/28/2016

² For permit O-1553-16-F(R1) administrative revision issued 3/06/2017

Document Number	Date	Description
90915	2/28/2018	Application AP100A for RO and Ownership Change
90916	2/28/2018	LMAPCD Response Confirmation Receipt
90998	3/5/2018	Request of Certificate of Authority
90999	3/5/2018	Co Response to District Admin Change
91609	3/7/2018	Received New Certificate of Authority
91111	3/9/2018	Construction application for new LEMT burners
91139, 91183, 91228, 91248, 91265, 91270, 91301	3/14, 3/15, 3/20, 3/21, 3/22, 3/23, 3/26/2018	Correspondences for updated emission factors
91464	3/21/2018	Plantwide PTE update
91518	4/11/2018	No permit required letter for new burners sent to company
94045	8/31/2018 to 9/14/2018	Construction application, construction PTE evaluation, and NPR determination for new zinc dissolver tank
94354	9/21/2018 to 10/1/2018	Construction application, construction PTE evaluation, and temporary exemption for multiple equipment.
95772	11/7/2018	Construction permit draft send to company for pre-review and company comments on draft permit.
96243	11/27/2018	District response to company comments.
96400	12/7/2018	Final construction permit C-1553-1037-18-F issued.
98267	4/29/2019	Application 100A for temporary generator
98281	5/1/2019	Exemption approval for temporary diesel generator
98383	5/9/2019	Operating application for FEDOOP permit revision and construction application for inkjet printers
98549	5/30/2019	IA determination for two inkjet printers
98619	6/5/2019	Construction application for seven flaw paint spray guns
98654	6/7/2019	Construction application for seven flaw paint spray guns (revised)
2764	6/24/2019	NPR determination for seven flaw paint spray guns
2696	7/12/2019	Construction application for thread line paint filters
2766	7/15/2019	NPR determination for thread line paint filters
OB124999	11/22/2019	Company comments on draft FEDOOP permit

Abbreviations and Acronyms

AP-42	- AP-42, <i>Compilation of Air Pollutant Emission Factors, published by U.S.EPA</i>
APCD	- Louisville Metro Air Pollution Control District
BAC	- Benchmark Ambient Concentration
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
gal	- U.S. fluid gallons
GHG	- Greenhouse Gas
HAP	- Hazardous Air Pollutant
Hg	- Mercury
hr	- Hour
in.	- Inches
lbs	- Pounds
l	- Liter
LMAPCD	- Louisville Metro Air Pollution Control District
mmHg	- Millimeters of mercury column height
MM	- Million
(M)SDS	- (Material) Safety Data Sheet
NAICS	- North American Industry Classification System
NO _x	- Nitrogen oxides
PM	- Particulate Matter
PM ₁₀	- Particulate Matter less than 10 microns
PM _{2.5}	- Particulate Matter less than 2.5 microns
ppm	- parts per million
PSD	- Prevention of Significant Deterioration
psia	- Pounds per square inch absolute
QA	- Quality Assurance
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO ₂	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- Water column
year	- Any period of twelve consecutive months, unless "calendar year" is specified
yr	- Year, or any 12 consecutive-month period, as determined by context

Preamble

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. Any permit shall be considered invalid if timely payment of annual fees is not made. The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

- G1. The owner or operator shall comply with all General Conditions herein and all terms and conditions in the referenced process/process equipment list.
- G2. All terms and conditions in this FEDOOP are enforceable by EPA, except those terms and conditions specified as District-only enforceable, and those which are not required pursuant to the Clean Air Act Amendments of 1990 (CAAA) or any of the Act's applicable requirements.
- G3. All application forms, reports, compliance certifications, and other relevant information submitted to the District shall be certified by a responsible official. If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.
- G4. The owner or operator shall submit an annual compliance certification, signed by the responsible official, to the District, on or before April 15 of the year following the year for which the certification applies. This certification shall include completion of District Form 9440-O.
- G5. Periodic testing, instrumental monitoring, or non-instrumental monitoring, which may include record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstrating continuing compliance with the terms and conditions of this permit.
- G6. The owner or operator shall retain all records required by the District or any applicable requirement, including all required monitoring data and supporting information, for a period of five years from the date of the monitoring, sampling, measurement, report, or application, unless a longer time period for record retention is required by the District or an applicable requirement. Records shall be retrievable within a reasonable time and made available to the District, Kentucky Division for Air Quality, or the EPA upon request.

- G7. The owner or operator shall provide written notification to the District, and receive approval, prior to making any changes to existing equipment or processes that would result in emissions of any regulated pollutant in excess of the allowable emissions specified in this permit.
- G8. This permit may be reissued, revised, reopened, or revoked pursuant to District Regulation 2.17. Repeated violations of permit conditions are sufficient cause for revocation of this permit. The filing of a request by the owner or operator for any reissuance, revision, revocation, termination, or a notification of planned changes in equipment or processes, or anticipated noncompliance shall not alter any permit requirement.
- G9. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed either 10 tons per year, or such lesser quantity as the EPA has established by rule, of any one Hazardous Air Pollutant (HAP) or 25 tons per year of all HAPs combined. Fugitive HAP emissions shall be included in this limit. HAPs are listed in section 112(b) of the CAAA and as amended in 40 CFR 63, Subpart C.
- G10. Except as otherwise specified or limited herein, the owner or operator shall not allow or cause the emissions to equal or exceed 100 tons per year of any regulated pollutant, including particulate matter, PM₁₀, PM_{2.5}, sulfur dioxide, carbon monoxide, nitrogen oxides, lead, hydrogen sulfide, gaseous fluorides, total fluorides, or Volatile Organic Compounds (VOC); any pollutant subject to any standard in District Regulation 7.02; or any substance listed in sections 112(r), 602(a) and 602(b) of the CAAA. Fugitive emissions shall be included in these limits for source categories listed in District Regulation 2.16.
- G11. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month.
- G12. Unless specified elsewhere in this permit, the owner or operator shall submit semi-annual reports demonstrating compliance with the emission limitations specified. The report shall contain monthly and consecutive 12-month totals for each pollutant that has a federally enforceable limitation on the potential to emit. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All compliance reports shall include the following per Regulation 2.17, section 3.5.
- A certification statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete", and
 - The signature and title of a responsible official of the company.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

Reporting Period

January 1 - June 30

July 1 - December 31

Report Due Date

August 29

March 1 of the following year

G13. The owner or operator shall comply with all applicable requirements of the following federally enforceable District Regulations:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance With Emissions Standards and Maintenance Requirements
1.06	Source Self-Monitoring, Emission Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
1.18	Rule Effectiveness
1.19	Administrative Hearings
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements
2.06	Permit Requirements – Other Sources
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
3.01	Ambient Air Quality Standards
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.04	Particulate and Sulfur Dioxide Reduction Requirements
4.05	Hydrocarbon and Nitrogen Oxides Reduction Requirements
4.06	Carbon Monoxide Reduction Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

- G14. The owner or operator shall comply with all applicable requirements of the following District-only enforceable regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
2.17	Federally Enforceable District Origin Operating Permits
5.00	Definitions
5.01	General Provisions
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.14	Hazardous Air Pollutants and Source Categories
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards

- G15. The owner or operator shall submit emission inventory reports, as required by Regulation 1.06, if so notified by the District.
- G16. The owner or operator shall submit timely reports of abnormal conditions or operational changes that may cause excess emissions, as required by Regulation 1.07.
- G17. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit shall be submitted to:

***Air Pollution Control District
701 W. Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137***

Plantwide Requirements

Facility Description

Republic Conduit Manufactures steel pipes and tubes from purchased steel coils.

Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.17	Federally Enforceable District Origin Operating Permits	1 through 9

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23		

Plantwide Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

- i. The owner or operator shall not allow or cause plantwide Hydrochloric Acid (HCl) emission to equal or exceed 10 tons during any 12 month consecutive period.³ [Regulation 2.17, section 5.1]

b. TAC

- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be *de minimis*. (See Comment 1) [Regulations 5.00 and 5.21]
- ii. The owner or operator shall perform a new Environmental Acceptability (EA) Demonstration or *de minimis* determination when the following events occur and submit the EA Demonstration on the schedule noted in the reporting section:⁴
 - (1) An application to construct or modify a process or process equipment is submitted to the District pursuant to Regulation 2.03, 2.04 or 2.05. [Regulation 5.21, section 4.22.1]
 - (2) A modification of any physical modeling parameters such as fence lines or building heights that are not otherwise subject to the requirements in this permit that affects the demonstration of compliance. [Regulation 5.21, section 4.22.2]; or
 - (3) A change occurs in the process or process equipment, including raw material or fuel type substitution. [Regulation 5.21, section 4.22.3]
- iii. When a new TAC is introduced or for any existing TAC which does not have an established BAC or *de minimis* value, the owner or operator shall calculate and report these values as part of any aforementioned EA Demonstration. The form, located in Attachment D, may be used for determining BAC and *de minimis* values. [Regulation 5.20, sections 3 and 4]

³ The source is potentially major for VOC and Single HAP (HCl). The source accepted less than 100 tpy for VOC and less than 10 tpy single HAP as FEDOOP limits.

⁴ Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to perform a new Environmental Acceptability Demonstration.

c. VOC

- i. The owner or operator shall not allow or cause total plantwide VOC emissions to equal or exceed 100 tons during any consecutive 12-month period.⁵ [Regulation 2.17, section 5.1]

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. HAP

- i. The owner or operator shall, monthly, calculate and record the plantwide total emissions for HCl for each month and 12-consecutive month period.

b. TAC

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to (M)SDS, analysis of emissions, and/or modeling results.

c. VOC

- i. The owner or operator shall, monthly, calculate and record the plantwide total emissions for VOC for each month and 12-consecutive month period.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. HAP

- i. The owner or operator shall report the plantwide total emissions for HCl for each month and 12-consecutive month period.

b. TAC

- i. The owner or operator shall submit new EA Demonstrations involving applications to construct or modify with the construction permit application. [Regulation 5.21, section 4.22.1]

⁵ The source is potentially major for VOC and Single HAP (HCl). The source accepted less than 100 tpy for VOC and less than 10 tpy single HAP as FEDOOP limits.

- ii. The owner or operator shall submit new EA Demonstrations involving modification of any physical modeling parameter, such as fence lines or building heights, that are not otherwise subject to the permit requirements for that facility that affects the demonstration of compliance with the operating permit renewal application. [Regulation 5.21, section 4.22.2]
- iii. The owner or operator shall submit new EA Demonstrations involving a change in a process or process equipment, including raw material or fuel type substitution before making the change.
[Regulation 5.21, section 4.22.3]
 - (1) Prior approval by the District is not required if the change does not result in emissions that exceed an EA goal, does not cause emissions of a TAC to no longer be de minimis, and a permit modification is not required. In this case, the new EA Demonstration shall be submitted within 6 months of the change.

c. VOC

- i. The owner or operator shall report the plantwide total emissions for VOC for each month and 12-consecutive month period.

S4. Testing

[Regulation 2.17, section 5.2]

a. General Requirements

These conditions apply for all testing unless superseded by requirements listed in the individual emission units.

- i. Devices of similar design may be represented by a common performance test contingent upon review and approval of the testing protocol by the District.
- ii. The owner or operator shall perform a capture efficiency test using EPA guidelines. In lieu of performing a capture efficiency test, the owner or operator may submit a reasonable estimate of capture efficiency with thorough justification subject to approval by the District.
- iii. Before conducting a performance test, the owner or operator shall submit a written performance test plan (stack test protocol). The plan shall include the EPA test methods that will be used for testing, the process operating parameters that will be monitored during the performance test, and the control device performance indicators that will be monitored during the performance test. The test plans shall be furnished to the District at least 30 calendar days prior to the actual date of the performance test. The Protocol Checklist for a Performance Test is attached to this permit. This checklist provides information that must be provided in the protocol.

- iv. The owner or operator shall be responsible for obtaining and analyzing audit samples when the EPA Reference Method is used to analyze samples to demonstrate compliance with the source's emission regulation. The furnishing, ownership, and processing of the audit samples and their results shall be described in the protocol. The audit samples shall be available for verification by the District during the onsite testing.⁶
- v. The owner or operator shall provide the District at least 10 working days prior notice of any performance test to afford the District the opportunity to have an observer present.
- vi. The owner or operator shall furnish the District with a written report of the results of the performance test within 60 calendar days following the actual date of completion of the performance test.

Comments for Plantwide Requirements

1. Republic Conduit submitted the TAC Environmental Acceptability Demonstration to the District in September 2008, March 2009, and July 2009. Tier 4 AERMOD air dispersion modeling was performed for each emission unit that has non-de minimis TAC emissions. Compliance with the STAR EA Goals was demonstrated in the revised EA Demonstration submitted in July, 2009. EA Demonstration was updated in May, 2019 according to material changes and updated emission factors per new stack tests. The District reviewed the EA Demonstrations submitted by the source. The following table demonstrates that the carcinogen risk and non-carcinogen risk values comply with the STAR EA goals required in Regulation 5.21.

Plantwide Sum	All new P/PE		All new P/PE	
Industrial Total R _C	1.06	< 75		< 38
Non-Ind. Total R _C	1.05	< 7.5		< 3.8
Industrial Total R _{NC} (max)	0.21	< 3.0		
Non-Ind. Total R _{NC} (max)	0.20	< 1.0		

⁶ Per an EPA rule change ("Restructuring of the Stationary Source Audit Program." Federal Register 75:176 (September 13, 2010) pp 55636-55657), sources became responsible for obtaining the audit samples directly from accredited audit sample suppliers, not the regulatory agencies.

		R_{NC} Total			LEMT Line				Hot Dip Galv. Line			
		Indus.	Non-Ind.	R _{NC}	Industrial		Non-Ind.		Industrial		Non-Ind.	
TAC	CAS #	R _{NC}	R _{NC}	EA	R _C	R _{NC}	R _C	R _{NC}	R _C	R _{NC}	R _C	R _{NC}
Plantwide Total Risk		0.21	0.20	0	0.16		0.15		0.89		0.89	
Nitric acid	7697-37-2	0.04	0.04	<3.0/1.0	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00
Sulfuric acid	7664-939-9	0.21	0.20	<3.0/1.0	0.00	0.21	0.00	0.20	0.00	0.00	0.00	0.00
HCl	7647-01-0	0.01	0.01	<3.0/1.0	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01
Xylene	1330-20-7	0.03	0.03	<3.0/1.0	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00
Ethyl Benzene	100-41-4	0.00	0.00	<3.0/1.0	0.16	0.00	0.15	0.00	0.00	0.00	0.00	0.00
Chromium +6	7440-47-3	0.01	0.01	<3.0/1.0	0.00	0.00	0.00	0.00	0.89	0.01	0.89	0.01
Aluminum Oxide	7429-90-5	0.01	0.01	<3.0/1.0	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01

Note: LEMT line and Hot Dip – Original application received 12/6/2004, therefore existing equipment for STAR.

Emission Unit U1: Weld Mills**Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1 through 4
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23		

Equipment: ^{7, 8}

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E3	Weld mill 3, make Thermatool, model CF14-5006460, capacity 18 ton/hr	2006	STAR, 7.08, 7.25	C3 (VOC only)	S50 (PM only)
E4	Weld mill 4, make Thermatool, model CF14-5006460, capacity 18 ton/hr	2006	STAR, 7.08, 7.25	C4 (VOC only)	

⁷ This unit was previously permitted by construction permit 474-07-C and 475-07-C. Each piece of equipment in this unit, except for E5, is an insignificant activity per PTE. This unit does not have any standards, monitoring and record keeping, and reporting requirements since there are not any TAC emissions.

⁸ The weld flaw paint marking system used for weld mills is permitted under Emission Unit U6.

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E5	Weld mill 5, make ThermoTool, model CF14-5006460, capacity 31 ton/hr ⁹	2006	STAR, 7.08, 7.25	C5 (VOC only)	
E100	One (1) cooling tower, make Marley, model NC-8310F2, capacity 30,000 gal/day	2006	STAR, 7.08	N/A	N/A

Control Devices ^{10 11}

Control ID	Description	Control Efficiency	Performance Indicator
C3	One (1) mist eliminator (2019)	80% (District pre-approved)	N/A
C4	One (1) mist eliminator (2019)		
C5	One (1) mist eliminator (2019)		

⁹ According to construction permit C-1553-1037-18-F, the District approved the capacity increase of weld mill E5 from 18 tph to 31 tph.

¹⁰ According to construction permit C-1553-1037-18-F, Republic Conduit disconnected dust collector C50 and installed three mist eliminators in 2018.

¹¹ The VOC emission bent inside the room and not out a stack after being controlled by the mist eliminators.

U1 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. Opacity

- i. The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. [Regulation 7.08, section 3.1.1]

b. PM

- i. The owner or operator shall not allow PM emissions to exceed the emission standards in Table 1 based on actual operating hours in a calendar day.¹² [Regulation 7.08, section 3.1.2]

Table 1. Unit 1 PM Emission Standards

P/PE	Capacity (tons/hr)	Reg. 7.08 PM Emission Limits (lb/hr)
E3	18	21.55
E4	18	21.55
E5	31	29.99
E100	5.2	9.99

c. TAC

- i. See Plantwide Requirements.¹³

d. VOC

- i. The owner or operator shall not allow VOC emissions from all the weld mills to exceed 6.44 tons during any consecutive 12-month period.¹⁴ [Regulation 7.25]
- ii. See Plantwide Requirements.

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

¹² PM emission standards for this unit are revised per updated capacity of each equipment. It has been demonstrated that the PM emissions from each weld mill and the cooling tower cannot exceed the lb/hr PM emission standard uncontrolled.

¹³ Currently there are no TAC emissions from this unit since the metallizing step of the threadline process is no longer in operation

¹⁴ This unit is subject to Regulation 7.25 because of VOC emissions from weld mill coolant. On January 6, 2014, Republic Conduit submitted a BACT analysis based on a PTE of 6.44 tpy VOC in accordance with Regulation 7.25.

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. Opacity

For weld mill E3, E4, and E5:¹⁵

- i. The owner or operator shall, monthly, conduct a one-minute visible emissions survey, during normal operation, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.
- iii. The owner or operator shall, monthly, maintain records of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

b. PM

- i. There are no routine monitoring and record keeping requirements for PM.

c. TAC

- i. See Plantwide Requirements.

d. VOC

- i. The owner or operator shall, monthly, calculate and record monthly and the previous 12-month period total VOC emissions for all the weld mills.
- ii. The owner or operator shall keep a record of the M(SDS) for any coolant used for the weld mills.
- iii. See Plantwide Requirement.

¹⁵ The District has determined that visible emission survey (VE) or Method 9 is not required for a cooling tower due to the nature of the PM emissions from this equipment.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. Opacity

- i. The owner or operator shall identify all periods of exceeding an opacity standard during a reporting period. The report shall include the following:
 - (1) Any deviation from the requirement to perform monthly visible emission surveys or Method 9 tests;
 - (2) Any deviation from the requirement to record the results of each VE survey and Method 9 test performed;
 - (3) The date and time of each VE Survey where visible emissions were observed and the results of any Method 9 test performed;
 - (4) The date, time and results of follow-up VE survey;
 - (5) The date, time, and results of any Method 9 test performed;
 - (6) Identification of all periods of exceeding an opacity standard; and
 - (7) If no deviations occur during the annual reporting period, the report shall contain a negative declaration.

b. PM

- i. There are no routine reporting requirements for PM emissions per Regulation 7.08.

c. TAC

- i. See Plantwide Requirements.

d. VOC

- i. The owner or operator shall report any periods of exceeding the VOC emission limit of the weld mills. The following information shall be included in the annual compliance reports:
 - (1) Emission Unit ID number and emission point or stack ID number;
 - (2) The beginning and ending date of the reporting period;
 - (3) Identification of all periods of exceedances or deviations; and
 - (4) If no deviations occur during the annual reporting period, the report shall contain a negative declaration.
- ii. See Plantwide Requirement.

Emission Unit U2: LEMT Electro Galvanizing Line**Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1 through 4
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5
40 CFR 63 Subpart WWWWW	National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations	63.11504 through 63.11513

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1, 2, 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23		

Equipment: ^{16,17,18}

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E7	Descaler process tank with three heaters, capacity 30 ton/hr	2006	STAR,7.08	C21	S21
E10	Electroclean process tank with two heaters, capacity 30 ton/hr	2006	STAR,7.08	C21	S21
E12A	Moisture dry oven, make Automated Solutions	2006	STAR, 7.08	C21	S21
E12B	Paint dry oven, make Automated Solutions	2006	STAR, 7.08	C21	S21
E18A ¹⁹	Zinc dissolver tank (T-32), make Indelco, capacity 2,000 gallon	2018	STAR,7.08,	C21	S21
E21	Rinse, pickle, plating, and post plating bath tanks, capacity 30 ton/hr	2006	STAR,7.08, 40CFR63, WWWWW	C21	S21
E30B	Ink transfer labeler with two print heads, make Promark	2009	STAR, 7.25	N/A	N/A

Control Devices

Control ID	Description	Control Efficiency	Performance Indicator
C21	One (1) wet scrubber, make Heil, model 7610-SP, 10,000 CFM. (2006)	83% PM (April 2010 Stack Test)	Monthly visual inspection

¹⁶ This unit was previously permitted by construction permits 13-05-C, 14-05-C, 15-05-C, 33-09-C, 25-05-C, and 130-09-C.

¹⁷ LEMT ID paint with drying oven and flaw paint spray guns are permitted under Emission Unit U6 for paint coating operations.

¹⁸ According to 5/9/2019 application, this unit has the following changes: renamed E7, E10, E12A, E12B, E30B; removed duplicate heater E8, E9, and E11, removed E30a and E24 since they are no longer at the facility.

¹⁹ The new zinc dissolver tank (E18A) replaces the existing zinc dissolver tank (E18).

U2 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP (40 CFR 63, Subpart WWWWWW)

- i. The owner or operator shall comply with all emission limitations, work practice standards, and operating limits in 40 CFR 63, Subpart WWWWWW. (See Attachment A)
- ii. See Plantwide Requirements.

b. Opacity

- i. The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. [Regulation 7.08, section 3.1.1]

c. PM

- i. The owner or operator shall not allow PM emissions to exceed 17.18 lb/hr from the LEMT galvanizing line (E7 – E21 combined) based on actual operating hours in a calendar day.²⁰ [Regulation 7.08, section 3.1.2]

d. TAC

- i. The owner or operator shall not allow Sulfuric Acid (H₂SO₄) from the LEMT galvanizing line to exceed 604 lbs/consecutive 12-month period.²¹ [Regulation 5.21, section 4.2 and section 4.3]
- ii. At all time, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate LEMT galvanizing line, including associated web scrubber C21 in a manner consistent with good air pollution control practice for minimizing emissions.²² [Regulation 5.21, section 4.2 and section 4.3]
- iii. See Plantwide Requirements.

²⁰ It has been demonstrated that the PM emissions from the LEMT galvanizing line cannot exceed the lb/hr PM emission standard uncontrolled.

²¹ The LEMT galvanizing line has sulfuric acid emission standards since its EA Demonstration was based on controlled PTE. AERMOD modeling results and controlled PTE for sulfuric acid were used to demonstrate compliance with EA Goals.

²² The sulfuric acid emission limit is based on controlled PTE calculated using emission factors from 4/3/2012 stack test. It has been demonstrated that the uncontrolled sulfuric acid emissions from the LEMT line cannot meet the EA goals specified in Regulation 5.21. Therefore, the owner or operator is required to operate the wet scrubber to meet the TAC standards.

e. VOC

- i. The owner or operator shall not allow or cause plantwide VOC emissions, including all coatings, additives, catalysts, solvents, thinners, and cleaners from all affected facilities subject to Regulation 7.25, including LEMT ink transfer labeler (U2: E30B) and ink-jet printers (U4: E13-D1, E13-D2), to equal or exceed 5 tons during any 12 consecutive month period, unless a BACT is submitted and approved by the District.^{23,24}
[Regulation 7.25, section 2.1 and 3.1]
- ii. See Plantwide Requirements.

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. HAP (40 CFR 63, Subpart WWWWWW)

- i. The owner or operator shall comply with all monitoring and record keeping requirements in 40 CFR 63, Subpart WWWWWW (See Attachment A).
- ii. See Plantwide Requirements.

b. Opacity

- i. The owner or operator shall, monthly, conduct a one-minute visible emissions survey, during normal operation, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.

²³ On January 6, 2014, Republic Conduit submitted a BACT analysis for weld mills coolant and thread line coolant and the District approved this BACT analysis that showed there was not cost effective add on control. Therefore, VOC emissions from weld mill coolant and thread line coolant are not subject to this plantwide 5 tpy limit per Regulation 7.25.

²⁴ It has been demonstrated that the total potential VOC emissions from LEMT ink transfer labeler (U2: E30B) and ink-jet printers (U4: E13-D1, E13-D2) cannot exceed 5 tpy uncontrolled. Therefore, they are in compliance with Regulation 7.25 and a BACT analysis is not required.

- iii. The owner or operator shall, monthly, maintain records of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

c. PM

- i. There are no routine monitoring and record keeping requirements for PM.

d. TAC

- i. The owner or operator shall monthly calculate and record Sulfuric Acid (H_2SO_4) emissions from the LEMT galvanizing line.
- ii. If there is any time that the wet scrubber (C21) is bypassed or not in operation when the LEMT galvanizing line is in operation, then the owner or operator shall keep a record of the following for each bypass event:
 - (1) Date;
 - (2) Start time and stop time;
 - (3) Identification of the control device and process equipment;
 - (4) H_2SO_4 emissions during the bypass in lb/consecutive 12-month period;
 - (5) Summary of the cause or reason for each bypass event;
 - (6) Corrective action taken to minimize the extent or duration of the bypass event; and
 - (7) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.
- iii. See Plantwide Requirements.

e. VOC

- i. The owner or operator shall, monthly, record the total amount used in gallons of each coating, solvent, cleaner, etc. for the LEMT ink transfer labeler (U2: E30B).
- ii. The owner or operator shall, monthly, calculate and record the monthly and the previous 12-month period total VOC emissions for the LEMT ink transfer labeler (U2: E30B).
- iii. See Plantwide Requirement.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. HAP (40 CFR 63, Subpart WWWWWW)

- i. The owner or operator shall comply with all reporting requirements in 40 CFR 63, Subpart WWWWWW (See Attachment A).
- ii. See Plantwide Requirements.

a. Opacity

- i. The owner or operator shall identify all periods of exceeding an opacity standard during a reporting period. The report shall include the following:
 - (1) Any deviation from the requirement to perform monthly visible emission surveys or Method 9 tests;
 - (2) Any deviation from the requirement to record the results of each VE survey and Method 9 test performed;
 - (3) The date and time of each VE Survey where visible emissions were observed and the results of any Method 9 test performed;
 - (4) The date, time and results of follow-up VE survey;
 - (5) The date, time, and results of any Method 9 test performed;
 - (6) Identification of all periods of exceeding an opacity standard; and
 - (7) If no deviations occur during the annual reporting period, the report shall contain a negative declaration.

b. PM

- i. There are no routine reporting requirements for PM standard per Regulation 7.08.

c. TAC

- i. The owner or operator shall report the following information regarding bypass activity in the annual compliance reports.
 - (1) Number of times the vent stream bypasses the wet scrubber (C21) and is vented to the atmosphere when the LEMT galvanizing line is in operation;
 - (2) Duration of each bypass to the atmosphere;

- (3) Calculated H₂SO₄ emissions, in lb/consecutive 12-month period, for each bypass and identification of any exceedance of the TAC standards; or
- (4) A negative declaration if no bypasses occurred.

ii. See Plantwide Requirements.

d. VOC

- i. There are no reporting requirements for VOC standard per Regulation 7.25.²⁵
- ii. See Plantwide Requirement.

S4. Testing

[Regulation 2.17, section 5.2]

a. PM/Cr(3)/H₂SO₄/HNO₃

- i. The owner or operator shall conduct EPA Reference performance tests for PM/Cr(3)/H₂SO₄/HNO₃ on the inlet and outlet of wet scrubber (C21) to determine the PM/Cr(3)/H₂SO₄/HNO₃ emission rate and control efficiency. Failure to perform the test, at maximum capacity, allowable/permitted capacity, or at a level of capacity which results in the greatest emissions may necessitate a re-test or necessitate a revision of the allowable/permitted capacity of the process equipment depending upon the difference between the testing results and the limit. The performance test shall be conducted by April 2022.²⁶ [Regulation 2.17, section 5.2]
- ii. See Plantwide Requirements.

²⁵ It has been demonstrated that the total potential VOC emissions from LEMT ink transfer labeler (U2: E30B) and ink-jet printers (U4: E13-D1, E13-D2) cannot exceed 5 tpy uncontrolled.

²⁶ The owner or operator shall retest the control devices within ten (10) years since the most recent District accepted performance test. The last stack test on wet scrubber (C21) was conducted in April 2012.

Emission Unit U3: Hot Dip Galvanizing Line**Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1 through 4
40 CFR 63 Subpart WWWWW	National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations	63.11504 through 63.11513

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1, 2, 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23		

Equipment²⁷

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E23	Hot dip enclosure (strip, degreasing, flux, and pickling tanks), make Gimeco	2006	STAR,7.08	C23	S23
E25A	Dryer 1, make Gimeco, capacity 28 ton/hr	2006	STAR,7.08	N/A	S13

²⁷ This unit was previously permitted by construction permits 18-05-C, 19-05-C, 20-05-C(R2), 21-05-C, 93-08-C, and 526-08-C.

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E25B	Zinc kettle, make Gimeco, capacity 28 ton/hr ²⁸	2019	STAR,7.08	C25	S25
E25C	Hot dip blow-out with two (2) process cyclones, make Gimeco, capacity 28 ton/hr	2006	STAR,7.08	C25	S25
E28	Passivation spray with water rinse tank, make Gimeco/Harrington, 28 ton/hr	2006 (Passivation 2008)	STAR,7.08, 40CFR63 Subpart WWWWWW	C25A	S28
E29	Dryer 2, make Gimeco, 28 ton/hr	2006	STAR,7.08	C25A	S28

Control Devices

Control ID	Description	Control Efficiency	Performance Indicator
C23	One (1) wet scrubber, make and model Unk (2006)	96% HCl (April 2010 Stack Test)	Monthly visual inspection
C25	One (1) baghouse, make Eurofilter, model CDF 60/20 (2006)	98% PM (District pre-approved)	0.9 - 3.5 inches water column
C25A	One (1) mist eliminator (2008)	80% (District pre-approved)	0.1 – 6.0 inches water column ²⁹

²⁸ According to construction permit C-1553-1037-18-F, a new zinc kettle is installed to replace the existing zinc kettle previously installed in 2006 and the capacity of E25A, E25B, and E25C was revised from 43.8 ton/hr to 28 ton/hr.

²⁹ Republic Conduit established this pressure drop range under normal operation per construction permit 526-08-C and submitted to the District on 1/5/2012.

U3 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

- i. See Plantwide Requirements.
- ii. The owner or operator shall comply with all emission limitations, work practice standards, and operating limits in 40 CFR 63, Subpart WWWW (See Attachment A).

b. Opacity

- i. The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. [Regulation 7.08, section 3.1.1]

c. PM³⁰

- i. The owner or operator shall not allow PM emissions to exceed 26.41 lb/hr from cleaning and pickling (E23) based on actual operating hours in a calendar day.³¹ (Construction permit 18-05-C)
[Regulation 7.08, section 3.1.2]
- ii. The owner or operator shall not allow PM emissions from dryer 1 (E25A), zinc kettle (E25B), and hot dip blow-out (E25C) combined to exceed 28.34 lb/hr based on actual operating hours in a calendar day.³² [Regulation 7.08, section 3.1.2]
- iii. The owner or operator shall not allow PM emissions from passivation spray and dryer 2 (E28 and E29) to exceed 28.34 lb/hr combined based on actual operating hours in a calendar day.³² [Regulation 7.08, section 3.1.2]

d. TAC

- i. The owner or operator shall not allow TAC emissions for emission point E23, E25A/E25B/E25C, and E28 to exceed the TAC emission standards

³⁰ Capacity of the hot dip galvanizing line has been revised to 28 tph. The previous 81,516 lbs/hr production limit was removed since it is greater than the revised capacity for this unit.

³¹ It has been demonstrated that the PM emissions from the cleaning and pickling tanks (E23) cannot exceed the lb/hr PM emission standard uncontrolled.

³² It has been demonstrated that the PM emissions from dryer 1 (E25A), zinc kettle (E25B), and hot dip blow-out (E25C) combined and PM emissions from passivation spray and dryer 2 (E28 and E29) cannot exceed the lb/hr PM emission standard uncontrolled.

listed in Table 2. ³³

[Regulation 5.21, section 4.2 and section 4.3]

Table 2. Unit 3 TAC Emission Standards

Emission Point	TAC Name	CAS #	TAC Limits Determination	
				Basis of Limits
E23	Hydrochloric acid	7647-01-0	De minimis values ³⁴	De Minimis
E25A/E25B /E25C	Lead	7439-92-1		De Minimis
E28	Chromium III	16065-83-1		De Minimis
	Chromium VI	7440-47-3	3.40 lbs/12-month ³⁵	Controlled PTE

- ii. At all time, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the hot dip galvanizing line, including associated web scrubber (C23) baghouse (C25), and mist eliminator (C25A) in a manner consistent with good air pollution control practice for minimizing emissions. ^{36,37}
[Regulation 5.21, section 4.2 and section 4.3]
- iii. See Plantwide Requirements.

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. HAP

- i. See Plantwide Requirements.

³³ This unit has TAC emission standards since its EA Demonstration was based on controlled PTE. If the controlled PTE for the TAC is less than de minimis level, use De Minimis as limit. If the controlled PTE for the TAC is greater than de minimis level, modeling results were used to calculate risk value to compare to the EA Goals and controlled PTE is used as limit.

³⁴ The TAC emission limits determined by de minimis values shall be updated each time when the District revises the BAC/de minimis values for these TACs. The current de minimis values per TAC list revised on 1/3/2019: HCl (10.8 lb/hr, 9,600 lb/yr), Cr (III) (0.1 lb/hr, 0.1 lb/8hr), Lead (0.043 lb/hr, 38.4 lb/yr).

³⁵ This value is updated per May 9, 2019 EA Demonstration, in which the Chromium VI emission rate was updated based on October 2018 stack test on Hot Dip Passivation.

³⁶ Republic Conduit can change screws to accommodate conduit sizes without control. PM and TAC emissions are generated when changing screws and the baghouse hood must be removed to change the screws. It has been demonstrated that the PM and TAC emissions during this activity cannot exceed their limits uncontrolled.

³⁷ It has been demonstrated that the uncontrolled potential TAC emissions from the hot dip galvanizing line cannot meet the EA goals specified in Regulation 5.21. Therefore, the owner or operator is required to operate the wet scrubber, baghouse, and mist eliminator to meet the TAC standards.

- ii. The owner or operator shall, monthly, calculate and record monthly and the previous 12-month period total HCl emissions for the hot dip galvanizing line.
- iii. The owner or operator shall comply with all monitoring and record keeping requirements in 40 CFR 63, Subpart WWWW (See Attachment A).

b. Opacity

- i. The owner or operator shall, monthly, conduct a one-minute visible emissions survey, during normal operation, of the emission points. No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.
- ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.
- iii. The owner or operator shall, monthly, maintain records of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

c. PM

- i. There are no routine monitoring and record keeping requirements for PM.

d. TAC

- i. The owner or operator shall, monthly, calculate and record TAC emissions (HCl, Pb, Cr(III), Cr(VI)) from emission point E23, E25A/E25B/E25C, and E28.
- ii. The owner or operator shall monitor and record the pressure drop across baghouse (C25) at least once per day. The normal pressure drop range is 0.9 to 3.5 inches water column. The owner or operator shall take corrective action if the pressure drop across the baghouse is out of normal range.
- iii. The owner or operator shall monitor and record the pressure drop across mist eliminator (C25A) at least once per day. The normal pressure drop range is 0.1 to 6.0 inches water column. The owner or operator shall take

corrective action if the pressure drop across the baghouse is out of normal range.

- iv. The owner or operator shall, daily, maintain records of any periods of time where the hot dip galvanizing line was operating and the wet scrubber (C23), baghouse (C25), or mist eliminator (C25A) was not operating or a declaration that the control devices were operated at all times that day when the hot dip galvanizing line was operating.
- v. If there is any time that the wet scrubber (C23) baghouse (C25), and mist eliminator (C25A) are bypassed or not in operation when the hot dip galvanizing line is in operation, then the owner or operator shall keep a record of the following for each bypass event:
 - (1) Date;
 - (2) Start time and stop time;
 - (3) Identification of the control device and process equipment;
 - (4) TAC emissions during the bypass, in lb/hr (for HCl, Pb, and Cr(III)) and lb/12 consecutive month period (for HCl, Pb, Cr(III), and Cr(VI));
 - (5) Summary of the cause or reason for each bypass event;
 - (6) Corrective action taken to minimize the extent or duration of the bypass event; and
 - (7) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.
- vi. See Plantwide Requirements.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. HAP

- i. See Plantwide Requirements.
- ii. The owner or operator shall comply with all reporting requirements in 40 CFR 63, Subpart WWWW (See Attachment A).

b. Opacity

- i. The owner or operator shall identify all periods of exceeding an opacity standard during a reporting period. The report shall include the following:

- (1) Any deviation from the requirement to perform monthly visible emission surveys or Method 9 tests;
- (2) Any deviation from the requirement to record the results of each VE survey and Method 9 test performed;
- (3) The date and time of each VE Survey where visible emissions were observed and the results of any Method 9 test performed;
- (4) The date, time and results of follow-up VE survey;
- (5) The date, time, and results of any Method 9 test performed;
- (6) Identification of all periods of exceeding an opacity standard; and
- (7) If no deviations occur during the annual reporting period, the report shall contain a negative declaration.

c. PM

- i. There are no routine reporting requirements for PM standard per Regulation 7.08.

d. TAC

- i. The owner or operator shall identify all periods of the pressure drop across the baghouse (C25) and mist eliminator (C25A) outside the normal range and any corrective action taken for each exceedance.
- ii. The owner or operator shall report the following information regarding bypass activity in the annual compliance reports.
 - (1) Number of times the vent stream bypasses the wet scrubber (C23), baghouse (C25), or mist eliminator (C25A) and is vented to the atmosphere when the hot dip galvanizing line is in operation;
 - (2) Duration of each bypass to the atmosphere;
 - (3) Calculated TAC emissions, in lb/hr (for HCl, Pb, and Cr(III)) and lb/12 consecutive month period (for HCl, Pb, Cr(III), and Cr(VI)), for each bypass and identification of any exceedance of the TAC standards; or
 - (4) A negative declaration if no bypasses occurred.
- iii. See Plantwide Requirements.

S4. Testing

[Regulation 2.17, section 5.2]

b. PM/HCl

- i. The owner or operator shall conduct EPA Reference performance tests for PM and HCl on the inlet and outlet of wet scrubber (C23) to determine the PM and HCl emission rate and control efficiency. Failure to perform the test, at maximum capacity, allowable/permitted capacity, or at a level of capacity which results in the greatest emissions may necessitate a re-test or necessitate a revision of the allowable/permitted capacity of the process equipment depending upon the difference between the testing results and the limit. The performance test shall be conduct by April 2020. ³⁸ [Regulation 2.17, section 5.2]
- ii. The owner or operator shall conduct EPA Reference performance test for PM on the inlet and outlet of baghouse (C25) to determine the PM emission rate and control efficiency. Failure to perform the test, at maximum capacity, allowable/permitted capacity, or at a level of capacity which results in the greatest emissions may necessitate a re-test or necessitate a revision of the allowable/permitted capacity of the process equipment depending upon the difference between the testing results and the limit. The performance test shall be conduct by April 2020. [Regulation 2.17, section 5.2]
- iii. See Plantwide Requirements.

³⁸ The owner or operator shall retest the control devices within ten (10) years since the most recent District accepted performance test. The last stack test on wet scrubber (C23) and baghouse (C25) was conducted in April 2010.

Emission Unit U4: Thread Lines**Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23		

Equipment: ^{39, 40}

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E13-A	Thread line #1, 15 ton/hr	2006	STAR, 7.25	N/A	N/A
E13-B	Thread line #2, 15 ton/hr	2006	STAR, 7.25	N/A	N/A
E13-C	Thread line LOD, 15 ton/hr	2006	STAR, 7.25	N/A	N/A
E13-D1	Ink-jet printer, make Promark, capacity 750 prints/hr	2017	STAR, 7.25	N/A	N/A
E13-D2	Ink-jet printer, make Promark, capacity 750 prints/hr	2017	STAR, 7.25	N/A	N/A

³⁹ Each piece of equipment in this unit is an insignificant activity per PTE. Threaded ends coating operations are permitted under Emission Unit U6 for paint coating operations.

⁴⁰ Each thread line consists of saw, facing, cap/coupling, bundling, and threading operations. The District has determined particulate emissions from the thread line are negligible due to coolant spray application.

Control Devices

There are no control devices associated with this unit.

U4 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. TAC

- i. See Plantwide Requirements.⁴¹

b. VOC

- i. The owner or operator shall not allow VOC emissions from the coolant used in thread lines to exceed 1.03 tons during any consecutive 12-month period.⁴² [Regulation 7.25]
- ii. The owner or operator shall not allow or cause plantwide VOC emissions, including all coatings, additives, catalysts, solvents, thinners, and cleaners from all affected facilities subject to Regulation 7.25, including LEMT ink transfer labeler (U2: E30B) and ink-jet printers (U4: E13-D1, E13-D2), to exceed 5 tons during any 12 consecutive month period, unless a BACT evaluation is submitted and approved by the District.⁴³ [Regulation 7.25, section 2.1 and 3.1]
- iii. See Plantwide Requirements.

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. TAC

- i. See Plantwide Requirements.

b. VOC

- i. The owner or operator shall, monthly, calculate and record monthly and the previous 12-month period total VOC emissions for all the thread lines.

⁴¹ TAC emissions from insignificant activities of this unit are de minimis per Regulation 5.21, section 2.3.

⁴² This unit is subject to Regulation 7.25 because of VOC emissions from thread lines coolant. On January 6, 2014, Republic Conduit submitted a BACT analysis based on a PTE of 1.03 tpy VOC in accordance with Regulation 7.25.

⁴³ It has been demonstrated that the total potential VOC emissions from LEMT ink transfer labeler (U2: E30B) and ink-jet printers (U4: E13-D1, E13-D2) cannot exceed 5 tpy uncontrolled. Therefore, they are in compliance with Regulation 7.25 and a BACT analysis is not required.

- ii. The owner or operator shall keep a record of the M(SDS) for any coolant used for the thread lines.
- iii. See Plantwide Requirement.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. TAC

- i. See Plantwide Requirements.

b. VOC

- i. The owner or operator shall report any periods of exceeding the VOC emission limit of the thread lines. The following information shall be included in the annual compliance reports:
 - (1) Emission Unit ID number and emission point or stack ID number;
 - (2) The beginning and ending date of the reporting period;
 - (3) Identification of all periods of exceedances or deviations; and
 - (4) If no deviations occur during the annual reporting period, the report shall contain a negative declaration.
- ii. See Plantwide Requirement.

Emission Unit U5: Natural Gas-fired Boilers and Heaters⁴⁴**Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.06	Standards of Performance for New Indirect Heat Exchangers	1 through 8

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23		

Equipment: ⁴⁵

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E14-A1	Hot dip boiler 1, make Superior Boiler Works, model Super Seminole X6-X-1000, 8.369 MMBtu/hr	2006	STAR,7.06	N/A	S14
E14-A2	Hot dip boiler 2, make Superior Boiler Works, model Super Seminole X6-X-1000, 8.369 MMBtu/hr	2006	STAR,7.06	N/A	
E14-A3	E-galv boiler, make Cleaver Brooks, FLX-700-800-16HW, 7.0 MMBtu/hr	2006	STAR,7.06	N/A	S15

⁴⁴ Natural gas-fired boilers and water heaters are not subject to 40 CFR 63, Subpart JJJJJ according to 40 CFR 63.11195(e) and (f).

⁴⁵ Equipment list is updated per construction application received 9/27/2018. Each boiler or heater in this unit is an insignificant activity per PTE.

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E14-A4	E-galv temp boiler, make LAARS Heating Systems, model Mighty Therm II MT2H1000NAC KICXN, 0.999 MMBtu/hr	2018	STAR	N/A	
E14-A5	HD economizer temp boiler, make Maxon, model Mighty Therm II MT2H1000NAC KICXN, 0.999 MMBtu/hr	2018	STAR	N/A	S30
E14-B1	Hop dip superheater, make GTS Energy, model VC-110-406 50, 1.0 MMBtu/hr	2006	STAR	N/A	S17
E14-B2	Dryer 1 heater, make ESA Pyronics, model 32 XNM/GA-R-D, 3.06 MMBtu/hr	2006	STAR	N/A	S13
E14-B3	Twelve (12) zinc kettle heaters, make ESA Pyronics, model SW 5-GA, 1.0 MMBtu/hr each	2006	STAR	N/A	
E14-B4	Hot dip dust burner, make Maxon, model Kinemax Medium Velocity, 1.0 MMBtu/hr	2018	STAR	N/A	S25
E14-B5	Five (5) building heater, make Cambridge, model S1850, 1.85 MMBtu/hr each	2006	STAR	N/A	N/A
E14-B6	Six (6) make-up air heaters, make Rapids, model 4054-MUA, 5.4 MMBtu/hr each	2006	STAR	N/A	N/A
E14-B7	Three (3) E-galv descaler heat exchangers, make Maxon, model 6" Tube-O-Therm Burner, 2.0 MMBtu/hr each	2006	STAR	N/A	S7, S8, S9
E14-B8	Two (2) E-galv E-clean heat exchangers, make Maxon, model 6" Tube-O-Therm Burner, 2.0 MMBtu/hr each	2006	STAR	N/A	S10, S11
E14-B9	Dryer 2 heater, make ESA Pyronics, model 32 XNM/GA-R-D, 3.06 MMBtu/hr	2006	STAR	N/A	S28
E14-B10	Zinc furnace, make Riello, model 40-N400S, 0.2 MMBtu/hr	2006	STAR	N/A	S31
E14-B11	Two (2) Thread line burners, make IMECO, model Ensign T2, 0.29 MMBtu/hr each	2006	STAR	N/A	S26A
E14-B12	LEMT moisture dry oven, make Maxon, model Ovenpak 425, 2.75 MMBtu/hr	2018	STAR	N/A	S12A
E14-B13	LEMT paint dry oven, make Maxon, model Ovenpak 425, 0.55 MMBtu/hr	2018	STAR	N/A	N/A

Control Devices

There are no control devices associated with this unit.

U5 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. Opacity

- i. The owner or operator shall not cause to be discharged into the atmosphere from the boilers (E14-A1 through A3) particulate matter emissions which exhibit greater than 20% opacity.⁴⁶ [Regulation 7.06, section 4.2]

b. PM

- i. The owner or operator shall not cause to be discharged into the atmosphere from the boilers (E14-A1 through A3) particulate matter in excess of 0.33 lb/MMBtu actual total heat input.⁴⁷ [Regulation 7.06, section 4.1.4]

c. SO₂

- i. The owner or operator shall not cause to be discharged into the atmosphere from the boilers (E14-A1 through A3) any gases which contain SO₂ in excess of 1.0 lb/MMBtu actual total heat input for combustion of gaseous fuels.⁴⁷ [Regulation 7.06, section 5.1.1]

d. TAC

- i. See Plantwide Requirements.⁴⁸

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. Opacity

- i. There are no monitoring or record keeping requirements for Opacity.

b. PM

- i. There are no monitoring or record keeping requirements for PM.

⁴⁶ The District has determined that the opacity standard will be met through the exclusive use of natural gas and propane.

⁴⁷ A one-time PM and SO₂ compliance demonstration has been performed for the boilers using AP-42 emission factors and combusting natural gas and propane, the regulatory emission standards cannot be exceeded.

⁴⁸ TAC emissions from the combustion of natural gas or propane are de minimis per Regulation 5.21, section 2.7.

c. SO₂

- i. There are no monitoring or record keeping requirements for SO₂.

d. TAC

- i. See Plantwide Requirements.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. Opacity

- i. There are no routine reporting requirements for Opacity emission per Regulation 7.06.

b. PM

- i. There are no routine reporting requirements for PM emissions per Regulation 7.06.

c. SO₂

- i. There are no routine reporting requirements for SO₂ emissions per Regulation 7.06.

d. TAC

- i. See Plantwide Requirements.

Emission Unit U6: Paint Coating Operations**Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.08	Standards of Performance for New Process Operations	1 through 4
7.59	Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations	1 through 7

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23		

Equipment: ⁴⁹

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E6	Weld flaw paint marking system for weld mills (U1)	2008	STAR, 7.08, 7.59	N/A	N/A

⁴⁹ This unit was previously permitted by construction permit 588-08-C, 589-08-C, 692-08-C, 693-08-C, and 35226-12-C.

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E22A	ID painting with dry oven for LEMT galvanizing line (U2)	2012	STAR, 7.08, 7.59	N/A ⁵⁰	S22A (paint booth only)
					S22B (dry oven only)
E22C	Flaw paint spray operation (3 spray guns) for LEMT galvanizing line (U2)	2019	STAR, 7.08, 7.59	N/A	N/A
E13-A1	Threaded ends coating for thread line (U4) – Thread Line #1 (2 spray nozzles)	2008	STAR, 7.08, 7.59	C13-A1 C13-A2	S26A
E13-A2	Flaw paint spray for thread line (U4) – Thread Line #1 (2 spray guns)	2019	STAR, 7.08, 7.59	N/A	N/A
E13-B1	Threaded ends coating for thread line (U4) - Thread Line #2 (2 spray nozzles)	2008	STAR, 7.08, 7.59	C13-B1 C13-B2	S26A
E13-B2	Flaw paint spray for thread line (U4) – Thread Line #2 (2 spray guns)	2019	STAR, 7.08, 7.59	N/A	N/A
E13-C1	Threaded ends coating for thread line (U4) - Thread Line LOD	2008	STAR, 7.08, 7.59	N/A	N/A
E102	Aerosol touch up coating operation	2008	STAR, 7.08, 7.59	N/A	N/A

Control Devices

Control ID	Description	Control Efficiency	Performance Indicator
C13-A1	Paint filter for Thread Line #1 ends coating	90%	N/A
C13-A2	Paint filter for Thread Line #1 ends coating	90%	N/A
C13-B1	Paint filter for Thread Line #2 ends coating	90%	N/A
C13-B2	Paint filter for Thread Line #2 ends coating	90%	N/A

⁵⁰ The LEMT ID paint booth was equipped with a thermal oxidizer (C22) which was operated only if solvent-based paint was used in the paint booth. Since 2012, Republic Conduit has switched from solvent-based paint to water-based paint and stopped using the thermal oxidizer (C22). In an application dated March 9, 2018, Republic Conduit requested to remove the thermal oxidizer (C22) and its associated burner from the permit.

U6 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

- i. The owner or operator shall not use any spray application coatings, additives, catalyst, solvents, or thinners containing target HAP compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), or perform any paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), in the paint removal process.⁵¹ [40 CFR 63.11180]
- ii. See Plantwide Requirements.

b. Opacity

- i. The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. [Regulation 7.08, section 3.1.1]

c. PM

- i. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr from each of the paint coating operations based on actual operating hours in a calendar day.⁵² [Regulation 7.08, section 3.1.2]

d. TAC

- i. See Plantwide Requirements.⁵³

e. VOC

- i. No coating shall be used with a VOC content, as applied, in excess of the following limits during a calendar daily averaging period:⁵⁴
[Regulation 7.59, section 3.1]

⁵¹ The equipment or processes covered by this permit is not currently subject to the standards of the NESHAP, 40 CFR 63 Subpart HHHHHH, due to the absence of the target HAPs in the spray coatings and paint stripping compounds.

⁵² It has been demonstrated that the PM emissions from each of the paint coating operations cannot exceed the lb/hr PM emission standard uncontrolled.

⁵³ The potential uncontrolled TAC emissions from each of the paint coating operations are de minimis.

⁵⁴ According to Regulation 1.05, section 4.1, a Control Technique Guidance (CTG) source emitting VOCs in quantities of 25 tons or more per year shall maintain daily records and calculations that demonstrate daily compliance with the VOC emission standards.

Table 3. VOC Content Standards for Coatings

Coating	VOC lb/gal	VOC kg/l
Clear coatings	4.3	0.52
Air-dried coatings	3.5	0.42
Extreme performance coatings	3.5	0.42
All other coatings	3.0	0.36

- ii. See Plantwide Requirements.

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. HAP

- i. The owner or operator shall keep a record of the M(SDS) for each raw material.
- ii. See Plantwide Requirements.

b. Opacity

- i. The owner or operator shall, at least once per month, inspect the filters in the LEMT ID paint booth to ensure proper installment (i.e. proper alignment/placement, gaps, etc.) and replace as needed.
- ii. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters of the LEMT ID paint booth and if filters were replaced.

c. PM

- i. There are no monitoring and recording keeping requirements for PM.

d. TAC

- i. See Plantwide Requirements.

e. VOC

- i. An owner or operator of an affected facility subject to this regulation shall maintain records that include, but not be limited to, the following:
[Regulation 7.59, section 6.1]

- (1) The regulation and section number applicable to the affected facility for which the records are being maintained,
 - (2) The application method and substrate type (metal, plastic, etc.),
 - (3) The amount and type of coatings (including catalyst and reducer for multi-component coatings) and solvent (including exempt compounds) used at each point of application during the calendar day.
 - (4) The VOC content as applied in each coating and solvent,
 - (5) The date, or usage record period, for each application of coating and solvent,
 - (6) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the calendar day.
- ii. The VOC content shall be calculated using a percent solids basis (excluding water and exempt solvents) for coatings using EPA Method 24.
[Regulation 7.59, section 6.2]
 - iii. The owner or operator shall, daily, record the total amount used in gallons of each coating, solvent, cleaner, etc.
 - iv. The owner or operator shall, monthly, calculate and record the monthly and consecutive 12-month total VOC emissions each calendar month to demonstrate compliance with the hundred (100) ton per year limit.
 - v. See Plantwide Requirement.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. HAP

- i. There are no routine reporting requirements for HAP.
- ii. See Plantwide Requirements.

b. Opacity

- i. The owner or operator shall report any deviations from the opacity requirements. The following information shall be included in the annual compliance reports:
 - (1) Emission Unit ID number and emission point or stack ID number;

- (2) The beginning and ending date of the reporting;
- (3) Identification of any deviation from the requirement to perform monthly visible inspections of the filters in the LEMT ID paint booth;
- (4) Identification of any deviation from the requirement to record the results of monthly visible inspections of the filters in the LEMT ID paint booth;
- (5) If no deviations occur during the annual reporting period, the report shall contain a negative declaration.

c. PM

- i. There are no routine reporting requirements for PM emissions per Regulation 7.08.

d. TAC

- i. See Plantwide Requirements.

e. VOC

- i. The owner or operator shall report any deviations from the requirement of using coatings with compliant VOC contents. The following information shall be included in the annual compliance reports:
 - (1) Emission Unit ID number and emission point or stack ID number;
 - (2) The beginning and ending date of the reporting period;
 - (3) Identification of all periods of using noncompliant coatings; and
 - (4) If no deviations occur during the annual reporting period, the report shall contain a negative declaration.
- ii. See Plantwide Requirement.

Insignificant Activities ⁵⁵

Equipment	Qty.	PTE (tpy)	Regulation Basis
Lime silo with baghouse used for water treatment plant ⁵⁶ (See Note 7)	1	1.34 PM ₁₀	Regulation 1.02
Zinc dissolver tank E18a (See unit U2)	1	0	Regulation 1.02
Flaw paint spray guns (See unit U2 and U4)	7	3.2 PM ₁₀	Regulation 1.02
Inkjet printers (See unit U4)	2	0.014 VOC	Regulation 1.02
Natural gas-fired boilers and heaters (See unit U5)	18	3.58 NO _x	Regulation 1.02
Cold solvent parts washers, each equipped with a secondary reservoir ⁵⁷ (See unit IA3)	9	0.01 VOC	Regulation 1.02, Appendix A
Emergency generator, 535 HP (See unit IA1)	1	4.15 NO _x	Regulation 1.02
Zinc recovery furnace	1	0.07 PM ₁₀	Regulation 1.02
Storage tanks (See unit IA2)	30	0.58 VOC	Regulation 1.02
Temporary storage totes (See unit IA2)	< 172	0.03 VOC	Regulation 1.02

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.
2. Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements.
3. The owner or operator shall annually submit an updated list of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.
4. Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
5. The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or, use Potential to Emit (PTE) as the annual emissions for each piece of equipment.
6. The District has determined that no monitoring, recordkeeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.
7. The lime silo is subject to Regulation 7.08 and subject to 2.34 lb/hr PM standard and 20% opacity standard. It has been demonstrated that the lime silo cannot exceed the PM and opacity uncontrolled. Therefore, there are no monitoring, record keeping, and reporting requirement for this equipment.

⁵⁵ The plant repair or maintenance activities not related to source's primary business activity, including the blast clean unit previously permitted by 442-08-C, are trivial activities.

⁵⁶ The lime silo was previously permitted by 26-05-C. The District has determined that there are no air pollutant emissions from collection sump, equalization tank, lime slurry recirculation tank, neutralization tanks, clarifier, filter press, sludge contact tank, gravity filters, post neutralization tank, and effluent monitoring tank.

⁵⁷ These parts washers were previously permitted by 27-05-C, 20-10-C, and 54-10-C.

Emission Unit IA1: Emergency Generator**Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
40 CFR 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	63.6603, 6604, 6605, 6625, 6640, 6645, 6655

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1, 2, 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23		

Equipment:

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E60	One (1) 535 HP (399 kW) emergency generator, make Cummins, model DFCC-5740131, engine model NTA855-03. Model year 2005 (Tier 2) ⁵⁸	N/A	40 CFR 63, ZZZZ, STAR	N/A	S60

⁵⁸ This engine is subject to 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, because it involves a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions. This engine is not subject to subject 40 CFR 60, Subpart IIII since the engine was manufactured in 2005. This emergency generator was previously permitted by 443-08-C.

Control Devices

There are no control devices associated with this unit.

IA1 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. HAP

- i. See Plantwide Requirements.
- ii. For an existing stationary CI RICE located at an area source of HAP emissions, the owner or operator shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. [40 CFR 63.6595(a)(1)]
- iii. Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. [40 CFR 63.6604(b)]
 - (1) Sulfur content: 15 parts per million (ppm) maximum for NR diesel fuel. [40 CFR 80.510(b)(1)(i)]
 - (2) A minimum cetane index of 40; or [40 CFR 80.510(b)(2)(i)]
 - (3) A maximum aromatic content of 35 volume percent. [40 CFR 80.510(b)(2)(ii)]
- iv. The owner or operator of an existing stationary RICE located at an area source of HAP emissions shall comply with the requirements Table 2(d) to this subpart, as the following: [40 CFR 63.6603(a)]
 - (1) The owner or operator shall change the oil and filter every 500 hours of operation or annually, whichever comes first. The owner or operator has the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart. [40 CFR 63, Subpart ZZZZ, Table 2d.(4)(a)]
 - (2) The owner or operator shall inspect the air cleaners every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63. Subpart ZZZZ, Table 2d.(4)(b)]

- (3) The owner or operator shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63. Subpart ZZZZ, Table 2d.(4)(c)]
- v. General requirements for complying with 40 CFR 63, Subpart ZZZZ:
 - (1) The owner or operator shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to the RICE at all times. [40 CFR 63.6605(a)]
 - (2) At all times the owner or operator shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
- vi. The owner or operator shall demonstrate continuous compliance with each emission limitation, operating limitation, and other applicable requirements in Tables 2d to this subpart. [40 CFR 63.6640(a)]
- vii. The owner or operator shall report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE. [40 CFR 63.6640(b)]
- viii. The owner or operator shall operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) below, is prohibited. If the owner or operator does not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency

engine under this subpart and must meet all requirements for non-emergency engines. [40 CFR 63.6640(f)]

- (1) There is no time limit on the use of the emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
- (2) The owner or operator may operate the emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2). [40 CFR 63.6640(f)(2)]
 - (a) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [40 CFR 63.6640(f)(2)(i)]
 - (b) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies, or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [40 CFR 63.6640(f)(2)(ii)]
 - (c) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [40 CFR 63.6640(f)(2)(iii)]
- (3) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-

emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(4)]

- (a) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system. [40 CFR 63.6640(f)(4)(i)]
- (b) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR 63.6640(f)(4)(ii)]
 - (i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator. [40 CFR 63.6640(f)(4)(ii)(A)]
 - (ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [40 CFR 63.6640(f)(4)(ii)(B)]
 - (iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [40 CFR 63.6640(f)(4)(ii)(C)]
 - (iv) The power is provided only to the facility itself or to support the local transmission and distribution system. [40 CFR 63.6640(f)(4)(ii)(D)]
 - (v) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. [40 CFR 63.6640(f)(4)(ii)(E)]

b. TAC

- i. See Plantwide Requirements.⁵⁹

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. HAP

- i. See Plantwide Requirements.
- ii. Monitoring, installation, collection, operation, and maintenance requirements: [40 CFR 63.6625]
 - (1) The owner or operator shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)]
 - (2) The owner or operator shall install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]
 - (3) The owner or operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup. [40 CFR 63.6625(h)]
 - (4) The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are

⁵⁹ It has been demonstrated that the uncontrolled TAC emissions from this equipment are de minimis.

exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]

iii. Recordkeeping requirements: [40 CFR 63.6655]

- (1) The owner or operator shall keep the following records that apply to your RICE: [40 CFR 63.6655(a)]
 - (a) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.6655(a)(1)]
 - (b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
 - (c) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.6655(a)(3)]
 - (d) Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]
 - (e) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
- (2) The owner or operator shall keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to the RICE, as the following: [40 CFR 63.6655(d)]
 - (a) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or (Table 6, section 9)
 - (b) Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and

operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (Table 6, section 9)

- (3) The owner or operator shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan. [40 CFR 63.6655(e)]
- (4) The owner or operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]

b. TAC

- i. See Plantwide Requirements.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. HAP

- i. See Plantwide Requirements.
- ii. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63, Subpart ZZZZ, Footnote 2 of Table 2d]

b. TAC

- i. See Plantwide Requirements.

Emission Unit IA2: Storage Tanks and Totes**Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
7.12	Standard of Performance for New Storage Vessels for volatile Organic Compounds	1 through 8

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23		

Equipment:

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
E100	Storage tanks and temporary storage totes with various contents and capacity. See following equipment list.	N/A	STAR, 7.12	N/A	N/A

Control Devices

There are no control devices associated with this unit.

Storage Tanks

Tank ID	Contents	Capacity (gallon)	Applicable Regulations
T-2	Paint	12,750	STAR, 7.12
T-3	Naphtha	5,600	STAR, 7.12
T-5	Sulfuric Acid	10,000	STAR
T-7	Nitric Acid (68% conc.)	5,000	STAR
T-9	Sodium Hydroxide	5,000	N/A
T-10	SEMT Process Sulfuric Acid	8,000	STAR
T-11	LEMT Process Sulfuric Acid	8,000	STAR
T-12	Process Chromate	1,500	N/A
T-13	Process Nitric Acid	1,500	STAR
T-15	Process Blended Cleaner	6,000	N/A
T-18	Sulfuric Acid/Hydrochloric Acid	6,604	STAR
T-19	Sulfuric Acid/Hydrochloric Acid	3,180	STAR
T-20	Sulfuric Acid/Hydrochloric Acid	6,604	STAR
T-21	Sulfuric Acid/Hydrochloric Acid	6,604	STAR
T-22	Sulfuric Acid/Hydrochloric Acid	6,604	STAR
T-23	Ammonia Hydroxide (portable tote)	264	N/A
T-28	Process Electrolyte Settling Tank	1,500	N/A
T-29	Electrolyte Recirculation Feed Pump Tank	700	N/A
T-31	Sodium Sulfate Mix Tank	2,000	N/A
T-32	Process Electrolyte	3,500	N/A
T-41A ⁶⁰	Nitric Acid	100	STAR
T-43	Water	135	N/A
T-50	Sulfuric Acid/Hydrochloric Acid	3,180	STAR
T-51	Sulfuric Acid/Hydrochloric Acid	6,604	STAR
T-52	Sulfuric Acid/Hydrochloric Acid	3,180	STAR

Storage Totes

Tote Materials	Content	Quan.	Capacity (gallon)	Applicable Regulations
GIM Cleaner PN	HF/Nitric Acid	2	350	STAR
Technicote ZNBL 340	Chromic/ Nitric Acid	30	350	STAR
Technicote 90 GM	Chromic/ Nitric Acid	20	350	STAR
Ammonia Solution	Ammonia	5	350	N/A
1760 Chemical		20	350	N/A
Sulfuric Acid Breentag	Sulfuric Acid	20	350	STAR

⁶⁰ This new nitric acid tank (T-41A) replaces the existing nitric acid tank (T-41).

Tote Materials	Content	Quan.	Capacity (gallon)	Applicable Regulations
Techniclean AC710	Phosphoric Acid	30	350	STAR
Anionic Polymer	Petroleum distillate	50	350	STAR, 7.12
Multan 2307GT	Tri-ethanolamine	40	350	N/A
Waste Oil		40	350	STAR
AW46 Lubricants		2	350	STAR

IA2 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. TAC

- i. See Plantwide Requirements.⁶¹

b. VOC

- i. The owner or operator shall not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia in the storage vessel(s), unless the storage tank is equipped with a permanent submerged fill pipe. [Regulation 7.12, section 3.3]
- ii. See Plantwide Requirements.

S2. Monitoring and Record Keeping

[Regulation 2.17, section 5.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. TAC

- i. See Plantwide Requirements.

b. VOC

- i. The owner or operator of the storage vessel(s) shall maintain records of the material stored and the vapor pressure in each storage vessel and if the contents of the storage vessel(s) are changed a record shall be made of the new contents, the date of the change, and the new vapor pressure in order to demonstrate compliance.
- ii. The owner or operator shall keep a record that shows if the storage vessel is equipped with a submerged fill pipe. Submerged fill pipe means any fill pipe the discharge of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean every fill pipe the discharge opening of which is entirely submerged when the liquid level is 2 times the fill pipe diameter above the bottom of the tank.
- iii. See Plantwide Requirement.

⁶¹ It has been demonstrated that the uncontrolled TAC emissions from this equipment are de minimis.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G12:

a. TAC

- i. See Plantwide Requirements.

b. VOC

- i. There are no compliance reporting requirements for this equipment for VOC emissions per Regulation 7.12.
- ii. See Plantwide Requirement.

Emission Unit IA3: Parts Washers**Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.18	Standards of Performance for Solvent metal Cleaning Equipment	1 through 6

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23		

Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
IE1 – IE9	Nine (9) parts washers, each equipped with a secondary reservoir	N/A	6.18, STAR	N/A	N/A

Control Devices

There is no control device associated with this unit.

IA3 Specific Conditions

S1. Standards

[Regulation 2.17, section 5.1]

a. VOC

- i. The owner or operator shall install, maintain, and operate the control equipment as follows: [Regulation 6.18, section 4.1]
 - (1) The cold cleaner shall be equipped with a tightly fitting cover that is free of cracks, holes, or other defects. If the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with 1 hand. [Regulation 6.18, section 4.1.1]
 - (2) The cold cleaner shall be equipped with a drainage facility that is designed so that the solvent that drains off parts removed from the cleaner will return to the cold cleaner. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system. [Regulation 6.18, section 4.1.2]
 - (3) A permanent, conspicuous label summarizing the operating requirements specified in section 4.2 of this Regulation shall be installed on or near the cold cleaner. [Regulation 6.18, section 4.1.3]
 - (4) If used, the solvent spray shall be a fluid stream, not a fine, atomized, or shower type spray, at a pressure that does not cause excessive splashing. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. Solvent flow shall be directed downward to avoid turbulence at the air-solvent interface and to prevent solvent from splashing outside of the cold cleaner. [Regulation 6.18, section 4.1.4]
 - (5) Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaner. [Regulation 6.18, section 4.1.6]
 - (6) The solvent-containing portion of the cold cleaner shall be free of all liquid leaks. Auxiliary cold cleaner equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible liquid leaks, visible tears, or cracks. [Regulation 6.18, section 4.1.8]
- ii. The owner or operator shall observe at all times the following operating requirements: [Regulation 6.18, section 4.2]

- (1) Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the waste solvent can evaporate. Waste solvent shall be stored only in a covered container. A covered container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. [Regulation 6.18, section 4.2.1]
 - (2) The solvent level in the cold cleaner shall not exceed the fill line. [Regulation 6.18, section 4.2.2]
 - (3) The cold cleaner cover shall be closed whenever a part is not being handled in the cold cleaner. [Regulation 6.18, section 4.2.3]
 - (4) Parts to be cleaned shall be racked or placed into the cold cleaner in a manner that will minimize drag-out losses. [Regulation 6.18, section 4.2.4]
 - (5) Cleaned parts shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner. [Regulation 6.18, section 4.2.5]
 - (6) A spill during solvent transfer shall be cleaned immediately, and the wipe rags or other sorbent material shall be immediately stored in a covered container for disposal or recycling, unless enclosed storage of these items is not allowed by fire protection authorities. [Regulation 6.18, section 4.2.6]
 - (7) Sponges, fabric, wood, leather, paper products, and other absorbent material shall not be cleaned in a cold cleaner. [Regulation 6.18, section 4.2.7]
- iii. The owner or operator shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°F (68°F). [Regulation 6.18, section 4.3.2]

b. TAC

- i. See Plantwide Requirements.⁶²

S2. Monitoring and Record Keeping
[Regulation 2.17, section 5.2]

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

⁶² Per Regulation 5.21, section 2.3, emissions from insignificant activity are de minimis.

a. VOC

- i. The owner or operator shall maintain records that include the following for each purchase: [Regulation 6.18, section 4.4.2]
 - (1) The name and address of the solvent supplier,
 - (2) The date of the purchase,
 - (3) The type of the solvent, and
 - (4) The vapor pressure of the solvent measured in mm Hg at 20°F (68°F).
- iv. All records required in Specific Condition S2.a shall be retained for 5 years and made available to the District upon request.
[Regulation 6.18, section 4.4.3]

b. TAC

- i. See Plantwide Requirements.

S3. Reporting

[Regulation 2.17, section 5.2]

The owner or operator shall report the following information, as required by General Condition G14:

a. VOC

- i. There are no routine compliance reporting requirements for Regulation 6.18.

b. TAC

- i. See Plantwide Requirements.

Attachment A - 40 CFR 63, Subpart WWWW (MACT)**National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations⁶³**

The owner or operator shall comply with the following requirements unless there are more current promulgated regulations:

Specific Conditions**S1. Standards**

[Regulation 2.17, section 5.2]

a. Compliance date [40 CFR 63.11505]

- i. If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than July 1, 2010.⁶⁴ [40 CFR 63.11506(a)]

b. Standards and management practices [40 CFR 63.11507]

- i. If you own or operate an affected new or existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAP, you must implement the applicable management practices in paragraphs (g)(1) through (12) of this section, as practicable. [40 CFR 63.11507(g)]
 - (1) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements. [40 CFR 63.11507(g)(1)]
 - (2) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable. [40 CFR 63.11507(g)(2)]
 - (3) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable. [40 CFR 63.11507(g)(3)]

⁶³ The LEMT Electro Galvanizing line and Hot Dip Galvanizing line are subject to 40 CFR 63, Subpart WWWW according to 40 CFR 63.11504(a)(1). Per 40 CFR 63.11505, each tank and each thermal spraying operation that contains or spray one or more of the plating and polishing metal HAP (Cd, Cr, Pb, Mn, and Ni) are covered by this subpart.

⁶⁴ According to 40 CFR 63.11505(b), an affected source is existing if you commenced construction or reconstruction of the affected source on or before March 14, 2008. The LEMT Electro Galvanizing line and Hot Dip Galvanizing line were installed in 2006, therefore they are existing sources.

- (4) Use tank covers, if already owned and available at the facility, whenever practicable. [40 CFR 63.11507(g)(4)]
- (5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality). [40 CFR 63.11507(g)(5)]
- (6) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable. [40 CFR 63.11507(g)(6)]
- (7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable. [40 CFR 63.11507(g)(7)]
- (8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable. [40 CFR 63.11507(g)(8)]
- (9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable. [40 CFR 63.11507(g)(9)]
- (10) Minimize spills and overflow of tanks, as practicable. [40 CFR 63.11507(g)(10)]
- (11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable. [40 CFR 63.11507(g)(11)]
- (12) Perform regular inspections to identify leaks and other opportunities for pollution prevention. [40 CFR 63.11507(g)(12)]

S2. **Monitoring, Record Keeping, and Reporting**

[Regulation 2.17, section 5.2]

a. Compliance requirements [40 CFR 63.11508]

- i. If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with 40 CFR 63.11509(b) of “What are my notification, reporting, and recordkeeping requirements?”⁶⁵
[40 CFR 63.11508(a)]
- ii. You must be in compliance with the applicable management practices and equipment standards in this subpart at all times. [40 CFR 63.11508(b)]
- iii. To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, you must satisfy

⁶⁵ Republic Conduit submitted the Initial Notification of Compliance on April 22, 2009.

the requirements specified in paragraphs (d)(1) through (8) of this section. [40 CFR 63.11508(d)]

- (1) You must always operate and maintain your affected source, including air pollution control equipment. [40 CFR 63.11508(d)(1)]
- (2) You must prepare an annual compliance certification according to the requirements specified in 40 CFR 63.11509(c), “Notification, Reporting, and Recordkeeping,” and keep it in a readily-accessible location for inspector review. [40 CFR 63.11508(d)(2)]
- (3) If you own or operate an affected tank or other operation that is subject to the management practices specified in 40 CFR 63.11507(g), “What are my standards and management practices?”, you must demonstrate continuous compliance according to paragraphs (d)(8)(i) and (ii) of this section. [40 CFR 63.11508(d)(8)]
 - (a) You must implement the applicable management practices during all times that the affected tank or process is in operation. [40 CFR 63.11508(d)(8)(i)]
 - (b) You must state in your annual compliance certification that you have implemented the applicable management practices, as practicable. [40 CFR 63.11508(d)(8)(ii)]

b. Notification, reporting, and recordkeeping requirements [40 CFR 63.11509]

- i. If you own or operate an affected source, as defined in 40 CFR 63.11505(a), “What parts of my plant does this subpart cover?”, you must submit an Initial Notification in accordance with paragraphs (a)(1) through (4) of this section by the dates specified. [40 CFR 63.11509(a)]
 - (1) The Initial Notification must include the information specified in 40 CFR 63.9(b)(2)(i) through (iv) of the General Provisions of this part. [40 CFR 63.11509(a)(1)]
 - (2) The Initial Notification must include a description of the compliance method (e.g., use of wetting agent/fume suppressant) for each affected source. [40 CFR 63.11509(a)(2)]
 - (3) If you start up your affected source on or before July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after July 1, 2008. [40 CFR 63.11509(a)(3)]
 - (4) If you startup your new affected source after July 1, 2008, you must submit an Initial Notification when you become subject to this subpart. [40 CFR 63.11509(a)(4)]

- ii. If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with paragraphs (b)(1) through (3) of this section. [40 CFR 63.11509(b)]
 - (1) The Notification of Compliance Status must be submitted before the close of business on the compliance date specified in 40 CFR 63.11506, “What are my compliance dates?” [40 CFR 63.11509(b)(1)]
 - (2) The Notification of Compliance Status must include the items specified in paragraphs (b)(2)(i) through (iv) of this section. [40 CFR 63.11509(b)(2)]
 - (a) List of affected sources and the plating and polishing metal HAP used in, or emitted by, those sources. [40 CFR 63.11509(b)(2)(i)]
 - (b) Methods used to comply with the applicable management practices and equipment standards. [40 CFR 63.11509(b)(2)(ii)]
 - (c) Description of the capture and emission control systems used to comply with the applicable equipment standards. [40 CFR 63.11509(b)(2)(iii)]
 - (d) Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements. [40 CFR 63.11509(b)(2)(iv)]
 - (3) If a facility makes a change to any items in (b)(2)(i), iii, and (iv) of this section that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change. [40 CFR 63.11509(b)(3)]
- iii. If you own or operate an affected source, you must prepare an annual certification of compliance report according to paragraphs (c)(1) through (7) of this section. These reports do not need to be submitted unless a deviation from the requirements of this subpart has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report. [40 CFR 63.11509(c)]
 - (1) If you own or operate an affected tank or other affected plating and polishing operation that is subject to the management practices specified in 40 CFR 63.11507(g), “What are my standards and management practices?” you must state in your annual compliance certification that you have implemented the applicable management practices, as practicable. [40 CFR 63.11509(c)(6)]
 - (2) Each annual compliance report must be prepared no later than January 31 of the year immediately following the reporting period and kept in a readily-accessible location for inspector review. If a

deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period.

[40 CFR 63.11509(c)(7)]

- iv. If you own or operate an affected source, and any deviations from the compliance requirements specified in this subpart occurred during the year, you must report the deviations, along with the corrective action taken, and submit this report to the delegated authority. [40 CFR 63.11509(d)]
- v. You must keep the records specified in paragraphs (e)(1) through (3) of this section. [40 CFR 63.11509(e)]
 - (1) A copy of any Initial Notification and Notification of Compliance Status that you submitted and all documentation supporting those notifications. [40 CFR 63.11509(e)(1)]
 - (2) The records specified in 40 CFR 63.10(b)(2)(i) through (iii) and (xiv) of the General Provisions of this part. [40 CFR 63.11509(e)(2)]
 - (3) The records required to show continuous compliance with each management practice and equipment standard that applies to you, as specified in 40 CFR 63.11508(d), “What are my compliance requirements?” [40 CFR 63.11509(e)(3)]
- vi. You must keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1) of the General Provisions to part 63. You may keep the records offsite for the remaining 3 years. [40 CFR 63.11509(f)]

c. General Provisions apply to this subpart [40 CFR 63.11510]

If you own or operate a new or existing affected source, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 1 of this subpart.

Table 1 to Subpart WWWWWW of Part 63 —Applicability of General Provisions to Plating and Polishing Area Sources

Citation	Subject
63.1 ¹	Applicability.
63.2	Definitions.
63.3	Units and abbreviations.
63.4	Prohibited activities.
63.6(a), (b)(1)–(b)(5), (c)(1),	Compliance with standards and maintenance

Citation	Subject
(c)(2), (c)(5), and (j)	requirements.
63.10(a), (b)(1), (b)(2)(i)–(iii), (xiv), (b)(3), (d)(1), (f)	Recordkeeping and reporting.
63.12	State authority and delegations.
63.13	Addresses of State air pollution control agencies and EPA regional offices.
63.14	Incorporation by reference.
63.15	Availability of information and confidentiality.

¹ Section 63.11505(e), “What parts of my plant does this subpart cover?”, exempts affected sources from the obligation to obtain title V operating permits.

Attachment B - Calculation Methods and Emission Factors

Emissions are calculated by multiplying the throughput (ton, MMCF, gallons, etc) or hours of operation of the equipment by the appropriate emission factor and 1 minus any control device's efficiency. The following emission factors and calculation methodology shall be used unless other methods or emission factors are approved in writing by the District.

For weld mills (U1), LEMT electro galvanizing line (U2), hot dip galvanizing line (U3), and thread line (U4), emission factors are shown in the following table. If emission factors were determined by stack test results, the owner or operator shall retest the emission unit within ten (10) years since the most recent District accepted stack test, according to Attachment C – General Testing Requirements.

Unit ID	Emission Point Description	Pollutants	Emission Factors Unit	Uncontrolled Emission Factors	Controlled Emission Factors	Emission Factor Sources	Projected Retest Date Prior to...
U1	Weld mills	PM/PM ₁₀	lb/ton	0.0054	0.0011	Stack test, July 2018	July 2028
		VOC	lb/ton	0.0446		BACT Analysis, 2014	
			OR, mass balance method based on actual coolant usage				
U2	LEMT line	PM/PM ₁₀	lb/ton	0.011	0.0026	Stack test, April 2012	April 2022
		Chromium (Cr) III	lb/ton	1.7E-06	1.6E-06	Stack test, April 2012	April 2022
		Sulfuric Acid	lb/ton	1.6E-02	3.2E-03		
		Nitric Acid	lb/ton	2.0E-04	3.7E-03		
U3	E23 (Hot dip enclosure)	PM/PM ₁₀	lb/ton	0.005	0.005	Stack test, April 2010	April 2020
		Hydrochloric Acid	lb/ton	0.082	0.003		
	E25A, B, C (dryer, zinc kettle, blowout) Normal Operation	PM/PM ₁₀ (Captured)	lb/ton	0.308	0.005	Stack Test April 2010	April 2020
		PM/PM ₁₀ (Fugitive)	lb/ton	0.05076	0.05076	Engineer Judgement	
		Al (Captured)	lb/ton	8.3E-06	1.4E-07	Republic Kettle Analysis	
		Al (Fugitive)	lb/ton	1.37E-06	1.37E-06		
		Pb (Captured)	lb/ton	3.7E-04	6.0E-06		
		Pb (Fugitive)	lb/ton	6.09E-05	6.09E-05		
	E25A, B, C (dryer, zinc kettle, blowout) Screw Changes	PM/PM ₁₀	lb/ton	0.0036	N/A	EPA-905/4-76-002	
		Aluminum (Al)	lb/ton	9.7E-8	N/A	Republic Kettle Analysis	
		Lead (Pb)	lb/ton	4.3E-6	N/A		
	E28 (Passivation)	Chromium (Cr) VI	lb/ton	4.33E-05	2.14E-5	Stack test, Oct. 2018	Oct. 2028
		Chromium (Cr) III	lb/ton	1.09E-4	5.38E-5		

Unit ID	Emission Point Description	Pollutants	Emission Factors Unit	Uncontrolled Emission Factors	Controlled Emission Factors	Emission Factor Sources	Projected Retest Date Prior to...
U4	Thread line	VOC	lb/ton	0.021		BACT Analysis, 2014	
			OR, mass balance method based on actual coolant usage				

For natural gas-fired boilers (U5), emission factors from AP-42, 1.4, Natural Gas Combustion, shall be used for emission calculations.

For paint coating operations (U6), emissions shall be calculated using mass balance method and based on pollutant contents in material safety data sheet (MSDS).

For internal combustion engine, emission factors from AP-42, 3.3, Gasoline and Diesel Industrial Engines, shall be used for emission calculations.

Attachment C - Protocol Checklist for a Performance Test

A complete protocol must include the following information

1. Facility name, location, and Plant ID number.
2. Responsible Official and environmental contact names.
3. Permit numbers that are requiring the test to be conducted.
4. Test methods to be used (*i.e.* EPA Method 1, 2, 3, 4, and 5).
5. Alternative test methods or description of modifications to the test methods to be used.
6. Purpose of the test including equipment and pollutant to be tested. (The purpose may be described in the permit that requires the test to be conducted or it may be to show compliance with a federal regulation or emission standard.)
7. Tentative test dates. (These may change but final notice is required at least 10 days in advance of the actual test dates in order to arrange for observation.)
8. Maximum rated production capacity of the system.
9. Production-rate goal planned during the performance test for demonstration of compliance (if appropriate, based on limits) and justification of the planned production rate, if less than the maximum rate.
10. Method to be used for determining rate of production during the performance test.
11. Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance.
12. Description of normal operation cycles, if applicable.
13. Discussion of operating conditions that tend to cause worse case emissions. This is especially important to clarify if worst case emissions do not result from the maximum production rate.
14. Process flow diagram.
15. The type and manufacturer of the control equipment, if any.
16. The process and/or control equipment parameters to be monitored and recorded during the performance test. These parameters may include pressure drops, flow rates, pH, temperature, *etc.* The values achieved during the test may be required during subsequent operations to describe the operating parameters that are indicative of good operating performance.
17. How quality assurance and accuracy of the data will be maintained, including sample identification and chain-of-custody procedures, audit sample provider, and number of audit samples to be used, if applicable.
18. Diameter of the pipe, duct, stack, or flue to be tested.
19. Distances from the testing sample ports to the nearest upstream and downstream flow disturbances such as bends, valves, constrictions, expansions, and exit points for outlet and additionally for inlet.
20. The number of traverse points to be tested for the outlet and the inlet if required, using Method 1 in Appendix A-1 to 40 CFR Part 60.

The Stack Test Review fee must be submitted with each stack test protocol.

The current fee is listed on the APCD website (louisvilleky.gov/APCD)

Attachment D – Determination of Benchmark Ambient Concentration (BAC)

Category _____ Number _____

Compound name _____ CAS No. _____

Molecular weight _____

BAC_C = _____ µg/m³, annual
de minimis _____ lb/hr; _____ lb/_____; _____ lb/year

BAC_{NC} = _____ µg/m³, _____ (avg period)

I. Carcinogen Risk - BAC_C (annual averaging period)

Carcinogen ☐ YES ☐ NO

- ☐ IRIS 10⁻⁶ risk = _____ µg/m³ URE = _____ (µg/m³)⁻¹ Date _____
- ☐ Cal 10⁻⁶ risk = _____ µg/m³ IUR = _____ (µg/m³)⁻¹ Date _____
- ☐ Mich 10⁻⁶ risk = _____ µg/m³ Date _____
- ☐ NTP Part A ☐ YES ☐ NO Part B ☐ YES ☐ NO
- ☐ IARC Group 1 ☐ YES ☐ NO Group 2A ☐ YES ☐ NO Group 2B ☐ YES ☐ NO
- ☐ ATSDR
- ☐ Sec. 3.3.4 Method # _____ 10⁻⁶ risk = _____ µg/m³ Date _____
- ☐ Default 0.0004 µg/m³

II. Chronic Noncancer Risk - BAC_{NC} (averaging period as specified)

- ☐ IRIS RfC = _____ µg/m³, annual Date _____
- ☐ Cal REL = _____ µg/m³, annual Date _____
- ☐ IRIS [1] RfD = _____ µg/kg/day × (70/20) = _____ µg/m³, annual Date _____
- ☐ Mich ITSL = _____ µg/m³, _____ averaging period Date _____
- ☐ TLV NIOSH = _____ µg/m³ × 0.01 = _____ µg/m³, 8-hour Date _____
- ☐ RTECS [1] _____ = _____ µg/m³, annual Date _____
 (describe calculation from Reg 5.20, sections 4.6 - 4.10)
- ☐ Default 0.004 µg/m³

[1] To use data based upon an oral route of exposure, the District must make an affirmative determination that data are not available to indicate that oral-route to inhalation-route extrapolation is inappropriate.

III. De minimis calculations

- ☐ Carcinogen BAC_C _____ µg/m³ × 0.54 = _____ lb/hour
 BAC_C _____ µg/m³ × 480 = _____ lb/year
- ☐ Chronic Noncancer Risk _____ (averaging period)
 BAC_{NC} _____ µg/m³ × F factor = _____ lb/(avg period)

BAC averaging period	F factor for avg period			
	Annual	24 hour	8 hour	1 hour
Annual	480			0.54
24 hours		0.12		0.05
8 hours			0.02	0.02
1 hour				0.001

[Regulation 5.22, table 1]

Prepared by _____ Date _____

Attachment E - Source-Wide Activities Not Otherwise Regulated ⁶⁶

Equipment Description	Quantity	Make	Model
Water treatment equipment, including collection sump, equalization tank, lime slurry recirculation tank, neutralization tanks, clarifier, filter press, sludge contact tank, gravity filters, post neutralization tank, and effluent monitoring tank	1	N/A	N/A
Hydrochloric acid (HCl) regeneration unit used for hot dip galvanizing line U3-E23, including filtration unit, reaction unit, solid separation unit, piping and service devices.	1	Soprin	N/A
Totes for Ferric Chloride Brenntag ⁶⁷	5	N/A	N/A
Totes for Magnesium Bi-sulfate ⁶⁷	30	N/A	N/A
Totes for Sodium Hydroxide ⁶⁷	5	N/A	N/A
Totes for Hydrogen Peroxide ⁶⁷	2	N/A	N/A
Totes for Flux ZnCl NH ₃ Cl ₄ ⁶⁷	20	N/A	N/A
Totes for Ferrous Sulfate ⁶⁷	25	N/A	N/A

⁶⁶ This table is for informational purposes only. The listed equipment emits zero or negligible air pollutants.

⁶⁷ There are no VOC/HAP/TAC emissions from these totes.

Fee Comment

1. On May 15, 2013, the Board approved revisions to Regulation 2.08, which implemented a new fee structure. As a result, Republic Conduit will be required to pay annual fees.
2. Permit fees for O-1553-16 (R3) are based on an Administrative Permit Revision fee (\$546.29) and a Significant Permit Revision (\$2,731.42). The total permit fees are \$3277.71.